

Appl. No. 09/730,932
Amdt. dated February 4, 2004
Reply to Office Action of November 4, 2003

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1.-5. (canceled)

Claim 6. (currently amended) ~~The chip device of claim 1~~ A chip device comprising:

- a. a single, common leadframe comprising a base and a plurality of leads extending therefrom;
- b. a first die coupled to a first side of the base with solder;
- c. a second die coupled to the second side of the base opposite the first side with solder; and
- d. a molded body surrounding at least a portion of the leadframe and the dies,
wherein a drain region of the first die is exposed through the molded body.

Claims 7.-8. (canceled)

Claim 9. (new) A chip device comprising:

- (a) a single leadframe comprising a base and a plurality of leads extending therefrom;
- (b) a first die comprising a first backside coupled to a first side of the base with a first solder material;
- (c) a second die comprising a second backside is coupled to the second side of the base opposite the first side of the base, wherein the second die is coupled to the second side of the base with a second solder material; and
- (d) a molded body surrounding at least a portion of the leadframe, the first die, and the second side,

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wherein the first backside of the first die and the second backside of the second die are exposed through the molded body and are substantially coplanar with external surfaces of the molded body, and

wherein the second backside forms an electrical contact for a power MOSFET in the second die.

Claim 10. (new) The chip device of claim 9 wherein the first die comprises a controller IC.

Claim 11. (new) The chip device of claim 9 wherein the first die comprises a power MOSFET.

Claim 12. (new) The chip device of claim 9 wherein the first and second dies each comprise an underbump material.

Claim 13. (new) The chip device of claim 9 further comprising a heat sink coupled to the exposed first backside of the first die.

Claim 14. (new) The chip device of claim 9 wherein the first solder material and the second solder material are different and have different reflow temperatures.

Claim 15. (new) The chip device of claim 14 wherein the first solder material comprises solder with a melting temperature of about 310 °C and the second solder material comprises a melting temperature of about 250 °C.

Claim 16. (new) The chip device of claim 11 wherein the electrical contact forms a drain region of the power MOSFET.